

ABSTRACT

A system and a method for augmentation of satellite positioning systems wherein a monitoring ground station (MGS) is connected to a computer center in charge of determining the level of error of a satellite (NS) broadcasting positioning signals and transmitting navigation correction data to a mobile user. Said transmission is performed using a digital satellite system using at least one digital satellite (DS) capable of broadcasting multiplexed data in down-link transmission to a user station (U). The user station (U) de-multiplexes and retrieves said navigation correction data from said digital satellite down-link transmission by means of a down-link frame adapter (7) connected to a satellite receiver (6). Specific data such as time or GNSS almanacs are replicated under specific format and put into specific part of signaling channel to enable time broadcast to standard receivers of DS system, and to speed-up acquisition of GNSS satellite signal by standard GNSS receivers possibly in use in said U station. A method is also disclosed for broadcasting time with a reasonable accuracy.